Environmental Impact Statement Preparation Notice



Kōke'e and Waimea Canyon State Parks Draft Master Plan

Prepared for Division of State Parks Department of Land & Natural Resources

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SECTION 1 INTRODUCTION AND PROJECT SUMMARY

1.1 INTRODUCTION

The Division of State Parks, Department of Land and Natural Resources, is preparing a master plan for the Kōke'e and Waimea Canyon State Parks.

The master plan will guide the management and development of Kōke'e and Waimea Canyon State Parks for a twenty-year period extending from 2005 to 2025. Preservation, enhancement, and management of existing resources and facilities, and the identification of potential interpretive programs and recreational opportunities are primary goals of the master plan. The State also wishes to preserve the unique historic character of Kōke'e and Waimea Canyon State Parks, a character that island residents and visitors have come to cherish.

Kōke'e and Waimea Canyon State Parks are two adjoining parks located on the west side of Kaua'i. They were the first parks established under the State Park System, created in recognition of the unique environmental resources, abundant recreational opportunities, and rich natural heritage existing in the uplands of western Kaua'i.

The parks were officially established in 1952 and 1965, respectively, and are administered by the Department of Land and Natural Resources (DLNR), Division of State Parks (DSP). In total, the two parks occupy 6,211 acres of land, with Kōke'e State Park encompassing 4,345 acres and Waimea Canyon State Park 1,866 acres.

1.2 PURPOSE AND NEED FOR DRAFT ENVIRONMENTAL IMPACT STATEMENT (DEIS) NOTIFICATION

The purpose of this EIS Preparation Notice is to inform interested parties of the proposed project and seek public input on subject areas which should be addressed in the forthcoming Draft Environmental Impact Statement (DEIS). The DEIS will address the potential environmental impacts associated with the planned improvements until the year 2025 at Kōke'e and Waimea Canyon State Parks.

The requirement for this EIS Preparation Notice is triggered by <u>three</u> of the eight conditions which stipulate the preparation of an Environmental Impact Statement:

- Use of state or county lands or funds;
- Use within Conservation District Lands; and,
- Use within any historic site or district as designated in the National or Hawai'i Register of Historic Sites;

1.3 APPLICANT AND ACCEPTING AUTHORITY

- 1) The applicant is the Department of Land and Natural Resources, State of Hawai'i.
- 2) The accepting authority is the Office of the Governor, State of Hawai'i.

SECTION 2 PROJECT DESCRIPTION

2.1 PROJECT LOCATION & HISTORIC BACKGROUND

♦ LOCATION

Kōke'e and Waimea Canyon State Parks are located in the ahupua'a of Waimea on the southwest side of the island of Kaua'i. Lands surrounding the parks consist primarily of State forest reserve, natural area reserve, and wilderness preserve lands administered by DLNR, Division of Forestry and Wildlife (DOFAW). These lands are actively managed by DOFAW for natural resource conservation, forest product development, hunting, and Access to DOFAW outdoor recreation. administered is via lands numerous unimproved 4-wheel drive ridge roads that originate off of Kōke'e Road within the two parks.

The Department of Hawai'ian Home Lands (DHHL) administers the Pu'u 'Ōpae Hawai'ian Homes Land, which abuts the southern end of Waimea Canyon State Park. The primary access road to the DHHL property is Hā'ele'ele Ridge Road, an unimproved 4-wheel drive road that originates off of Kōke'e Road within the park boundary. See Figure 2-1, Project Area Map.

Project Area

The master plan *project area* includes Kōke'e State Park (4,345 acres) and Waimea Canyon State Park (1866 acres), for a total area of 6,211 acres

Study Area

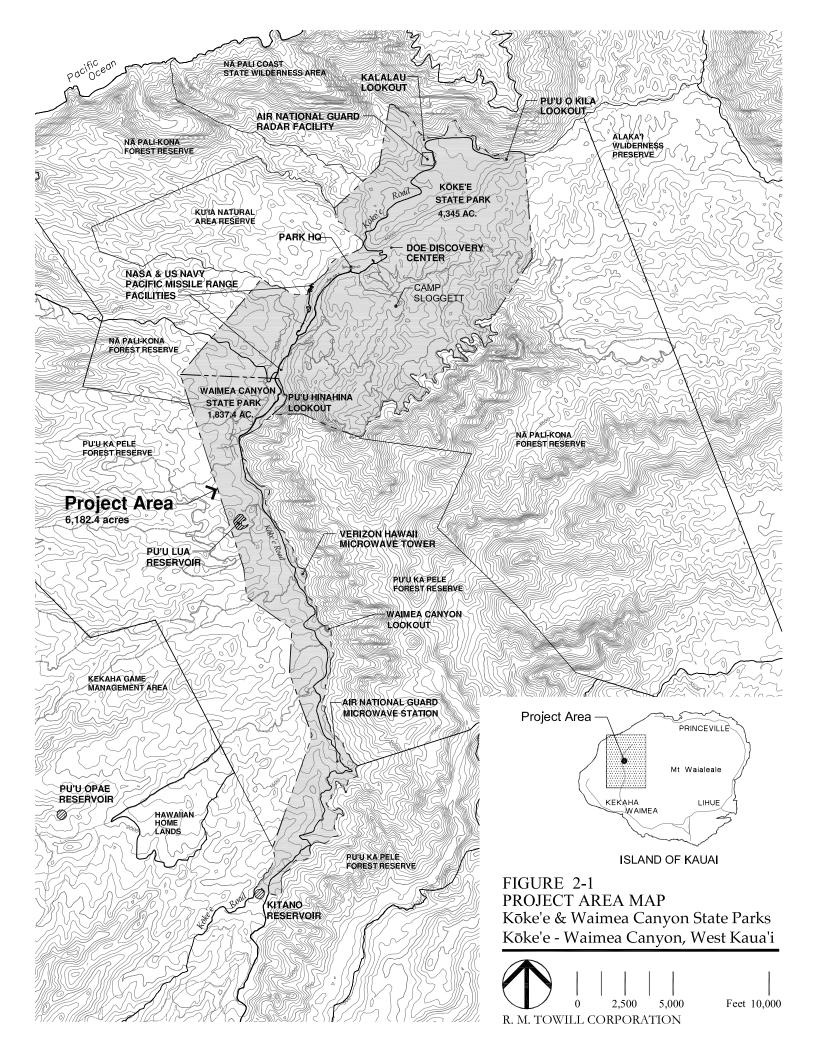
The master plan *study area* includes the project area plus adjacent State-owned lands that

include Pu'u ka Pele and Nā Pali-Kona Forest Reserves, Alaka'i Wilderness Preserve, Ku'ia Natural Area Reserve, and the Mokihana Game Management Area. State-owned lands along Waimea Canyon Drive are included in the study area as a possible location for expansion of Waimea Canyon State Park.

♦ PARK HISTORY

The history of Kōke'e and Waimea State Parks' development traces back to 1856 when Kaua'i pioneer Valdemar Knudsen obtained a lease from the Kingdom of Hawai'i for more than a hundred square miles of Crown land near Waimea. Valdemar used the upland area for ranching, but was personally drawn to the mountains for retreat and recreation. He built a small cabin in the Halemanu that he, his family and friends would use during visits to the mountains, and when crossing between Waimea and Wainiha.

Valdemar's son Augustus inherited his love for the mountains and continued hosting annual camping parties in Kōke'e. Over the years, Knudsen and his guests developed campsites and eventually built mountain cabins as retreats from the summer heat on the coast. Before the Knudsen lease expired in 1917, plans were underway to create a territorial park in the upland forests. The following year, 415 acres of Pu'u ka Pele were set aside for this purpose and 47 campsites were surveyed and staked out along the bottoms of the shallow valleys at Kōke'e and Halemanu.



Over the next two decades, more land was added to the parks and the camp lots began filling with permanent recreational cabins developed by the camp lot leaseholders. The period leading up to World War II also saw the development of the Kōke'e irrigation ditch system and extensive reforestation efforts undertaken by the Civilian Conservation Corps based at Kanaloahuluhulu Meadow.

World War II brought closure to Kōke'e for recreational use. It also brought a new all-weather road that greatly improved access to the uplands at the war's end and strengthened the case for expanding the mountain park, then managed by the county. In 1949, the Division of Territorial Parks was created, followed soon after in 1952 by the establishment of Kōke'e Territorial Park, the Division's first charge. Upon statehood in 1959, Kōke'e Park was transferred to the Department of Land and Natural Resources. In 1965, Waimea Canyon State Park was established.

2.2 MASTER PLAN GOALS

The Master Plan is prepared to guide development of the two parks and surrounding natural areas to the year 2025. To frame the master planning process, overall goals for Kōke'e and Waimea Canyon State Parks and for each resource category were set by the project team. Goals were developed for each of the resource categories after a review of the values, issues, concerns, and problems that were raised during the data collection phase of the project, and through an evaluation of the mission and goal statements of each of the DLNR divisions.

Goal 1: Natural Resources

To protect, preserve, and restore the unique natural environments of Kōke'e and Waimea Canyon, enhance human understanding and appreciation of Hawai'i's native ecosystems and introduced species, and insure the continued existence of Hawai'i's unique flora and fauna for the benefit of Hawai'i's future generations.

Goal 2: Cultural Resources

To protect, preserve, and manage archaeological resources, historic sites and traditional cultural places within Kōke'e and Waimea Canyon State Parks, and insure the continuity of the traditional cultural values and practices that are unique to these parks.

Goal 3: Scenic Resources

To protect, enhance and interpret the scenic resources of Kōke'e and Waimea Canyon State Parks and expand opportunities for visitors to experience the Parks' scenic resources.

Goal 4: Outdoor Recreational Resources

To establish a broad range of outdoor recreational opportunities that promotes heightened visitor awareness and appreciation of the parks' natural and cultural resources and encourages the enjoyment of the outdoors in a safe and responsible manner.

Goal 5: Recreational Residences

To preserve, manage and interpret the legacy of the recreational residences in Kōke'e and Waimea Canyon State Parks and promote the cultural landscape as part of the parks' history.

Goal 6: Interpretation

To heighten visitor understanding, awareness and appreciation of the Parks' natural, cultural, scenic, and recreational resources, and to promote preservation of these resources through public education programs and interpretive materials.

Goal 7: Park Infrastructure

To provide safe, economical, and dependable utility and infrastructure systems to facilitate

visitors' and users' experiences while in the park, and to ensure that valuable natural, cultural, and scenic resources are not compromised by utility or infrastructure development.

Goal 8: Organizational Development and Management

To create a management structure that will ensure that operations at Kōke'e and Waimea Canyon State Parks are financially self-sustaining, protect natural resources, and provide a high level of customer service. Also, to have in place a comprehensive program of education, prevention, enforcement, and control in order to respond to, and where possible eliminate natural and man-made threats to public safety and the natural environment.

2.3 MASTER PLANNING PROCESS

The master plan was developed through a four step process:

◆ BACKGROUND INVENTORY & FACILITY ASSESSMENT

Background information about park resources, activities, operations, management, and issues and opportunities was obtained through research of existing documentation, field investigations, agency comments, and public input. The background studies prepared for the Master Plan focus on the following subject areas:

- Natural Resources
- Cultural and Historic Resources
- Scenic Resources
- Outdoor Recreational Resources
- Other issues identified by agencies and the public.
- Recreation Residences
- Infrastructure

- Organizational Development and Management
- Costs and Revenues

♦ ANALYSIS

Each resource is analyzed in terms of its condition-fragility, resource limits, public use, user limits, and issues. Opportunities and constraints of the resources were related to protection, management, restoration, development, enhancement, and interpretation.

For the parks' developed resources, analysis includes:

- Evaluation of existing buildings to determine if they are suitable for short-term and/or long-term use.
- Evaluation of the historic integrity of buildings within the parks and assessment of their value to Kōke'e's cultural and historic landscape.
- Evaluation of existing utilities, (water, sewage, electrical-communication, and roads) and identification of utility deficiencies and necessary repair work.
- Estimation of budgetary costs for repairs to park buildings, infrastructure, and utilities.

◆ PLAN ALTERNATIVES DEVELOPMENT AND EVALUATION

Four conceptual master plan alternatives are presented for the Kōke'e and Waimea Canyon State Parks. The alternatives are based on available information, the analysis and development themes for the Kōke'e and Waimea Canyon State Parks, the adjoining game management areas, the forest reserves, and the Natural Area Reserve.

The development of the alternatives included the following tasks:

 Establishment of development themes. The alternatives express a range of development

- options from status quo and low-intensity development to expanded development of park facilities and recreational resources.
- Identification of Recreation Opportunity Zones (ROZ). ROZs are a means of geographically organizing the plan area according to user expectations "wilderness" and development. Five ROZs are identifiedfor Kōke'e and Waimea Canyon State Parks, including primitive, semi-primitive non-motorized, semiprimitive non-motorized, rustic, concentrated. These designations establish levels of access, facility development, and environmental preservation.
- Identification of park activities, programs, and use intensities that were related to the different development themes.
- Evaluating the alternatives based on costs, public review, and agency comments, park resources and recreation goals.

The planning process included an opportunity for community members, interested parties, and other groups to participate in developing plan elements, to comment on plan concepts, and to vote for a preferred alternative.

◆ PLAN SELECTION AND REFINEMENT

A single preferred alternative was selected based on public input, DLNR staff and consultant recommendations, and review by the Board of Land and Natural Resources (BLNR). The preferred plan underwent revisions through input received from the BLNR, DLNR staff, the Kōke'e Task Force, and public comments received during the alternatives evaluation phase.

2.4 ALTERNATIVES CONSIDERED

OVERVIEW

Four conceptual master plan alternatives are presented for the Kōke'e and Waimea Canyon State Parks. They are:

◆ ALTERNATIVE 1: NO ACTION ALTERNATIVE

Facilities, activities, and programs are administered on a case-by-case basis at the two parks. No new facilities or park programs are developed. Current activities and programs will be continued with existing revenues and management resources.

Objectives:

- Continue existing programs at current levels.
- Continue existing visitor services at current levels (e.g. museum and Lodge).
- Monitor park use and users to establish park resource limits.
- Establish revenue enhancement program, e.g. entrance fee.
- Protect the park resources (natural and manmade).
- Establish design guidelines for the protection of historic structures.
- Maintain existing roads and utilities.

Features:

- Continue existing programs and management structure.
- Re-lease existing recreation residences.
- Establish recreation residence maintenance fees for infrastructure.
- Renovate and/or replace utilities and infrastructure as necessary to maintain existing levels of service.

◆ ALTERNATIVE 2: REMEDIAL IMPROVEMENT PLAN

Preserve the existing character of the park with upgrades to visitor amenities, infrastructure, and utilities in a manner that reinforces the Parks' historic character and avoids intensifying development. A fundamental goal of the remedial plan is to enhance revenue generation sufficiently to sustain park operations, maintenance, and routine program upgrades. Improvements to facilities, activities, and programs are to be administered on a case-by-case basis.

Objectives:

- Achieve sustainable operations with 35% of park revenues.
- Upgrade existing park facilities such as lookouts, trails, and access roads with minor improvements to the lookouts, trails, and roads to enhance the visitor experience.
- Develop design guidelines to protect the historic value and rustic character of the recreation residences and other park structures.
- Continue existing programs at current levels.
- Enhance park identity and visitor orientation through interpretive and directional signs.
- Monitor park use and users to establish resource limits.
- Renovate and/or repair utilities and infrastructure to meet existing levels of service.

Features:

- Enhance park revenue generation. Collect entry fee. Expand user fees for operations and maintenance.
- Repair and resurface entire length of Kōke'e Road. Repair and re-gravel collector and local roads serving recreation residences. Repair Camp 10 Road for public access.

- Retain water tank lots for short-term rental.
 Select limited number of Kōke'e lots for park use. Re-lease all remaining lots in 2005.
 Enforce "Kōke'e Vernacular" design guidelines for all recreation residences with historic rating of 3, 4, and 5. Establish maintenance fees for infrastructure.
- Park HQ: Relocate existing Park HQ building closer to lodge and develop as visitor service center.
- Continue CCC Camp renovation for use as interpretive, educational, and research center.
- Repair existing trails and improve directional and informational signage at trailheads. Complete Ditch Trail and Cliff Trail segments, and Pihea Trail boardwalk.
- Improve pathways and visitor amenities at all lookouts. Add visitor orientation and interpretive signage.

◆ ALTERNATIVE 3: LIMITED ACCESS / CONSERVATION PLAN

Restore the parks to a more natural state by scaling back existing development. The Conservation Plan seeks to create a destination in which visitors can experience the area's unique native ecosystem and historic-cultural landscape through education and interpretive programs and personal interaction in the environment.

Objectives:

- Achieve sustainable operations with 35% of park revenues.
- Establish revenue enhancement programs, e.g. entrance fee.
- Protect and restore the native flora, fauna, and habitats in the parks and surrounding natural areas.
- Educate park visitors about the ecological values of the region and the need for protection and restoration efforts.

- Enhance park identity and visitor orientation through interpretive and directional signs.
- Establish design guidelines for the protection of historic structures.
- Limit vehicle access on park roads and centralize pedestrian access in remote areas.
- Remove structures that do not contribute to the historic character of the area and revegetate the cleared area with native plants.
- Reduce the "footprint" of developed visitor facilities.
- Eliminate introduced flora and fauna.

Features:

- Establish revenue enhancement program.
 Collect entry fee. Expand user fees for operation and maintenance.
- Re-lease all lots with historic rating of 3, 4, and 5. Remove all structures with historic rating of 1 or 2. Enforce "Kōke'e Vernacular" design guidelines. Establish maintenance fees for infrastructure.
- Allow no new recreation residence construction. Restore vacant lots to natural conditions.
- Prohibit vehicles past Kalalau Lookout.
 Prohibit back country vehicle access on Camp 10 Road.
- Remove built facilities from Pu'u o Kila Lookout.
- Repair and resurface Kōke'e Road up to Kalalau Lookout. Repair and re-gravel collector and local roads serving recreation residences.
- Connect Faye Road and Halemanu Road across Kōke'e Stream.
- Develop new Park HQ / visitor service building near Lodge. Develop thematic "orchard" landscaping and covered walkways to unify setting.
- Re-develop CCC Camp as a natural resource research and education center with residential facilities for staff and researchers.

- Develop backcountry "gateway" trail hubs at Camp Sloggett, Awa'awapuhi Trail Head, and Kalalau Lookout. Reduce number of trails in Kahuama'a Flats.
- Develop interpretive facilities at Waimea Canon Lookout, Park HQ, Camp Sloggett, Awa'awapuhi Trail Head, and Kalalau Lookout.
- Conduct habitat restoration program in Kahuama'a Flats.
- Monitor park use and users to establish resource limits.
- Renovate and upgrade utilities and infrastructure.

◆ ALTERNATIVE 4: ENHANCED PARK FACILITY DEVELOPMENT PLAN

To optimize recreational opportunities and facilities and to expand interpretive programs that allow park visitors to experience the natural, cultural and historic resources. The plan seeks to create a destination that enhances the wildland experience that visitors of all physical skill levels can enjoy and appreciate while engaging in a variety of outdoor recreation and educational activities.

Objectives:

- Achieve sustainable operations with 35% of park revenues.
- Enhance park identity and visitor orientation through interpretive and directional signs.
- Protect and restore the historic and cultural resources in the parks and surrounding areas.
- Enhance recreational opportunities for park visitors by increasing trail mileage, creating new trail hubs and camping facilities, and providing interpretive hikes/tours, etc.
- Focus development at lookouts and along the roadway corridor between Pu'u ka Pele and Kanaloahuluhulu Meadow.

- Integrate the parks and adjacent forest reserves by means of an enhanced trail system of nodes and hubs and trailhead kiosks.
- Protect and restore the native flora, fauna, and habitat in the parks and surrounding natural areas.
- Educate park visitors about the ecological values in the region and protection and restoration efforts.
- Establish design guidelines for the protection of historic structures and in the construction of new structures.
- Remove structures that do not contribute to the historic character of the area and revegetate the cleared area with native vegetation.
- Expand opportunities to learn about the parks' history and cultural landscape through interpretive facilities and tours, (both guided and self-guided, vehicles and walking tours) and kiosks.
- Design and construct a visitor center that orients visitors to the parks and shows the resources and history of the parks through audio-visual programs, exhibits, and displays.
- Develop "satellite" interpretive facilities at lookouts and trail hubs.
- Develop tours around themes, e.g. native forests, bird-watching, historic cabins (for architectural history).
- Expand concession and management leases to provide interpretive and visitor services.
- Develop interpretive (nature) trails at locations that are ADA accessible.

Features:

 Re-lease all existing recreation residences that contribute to the historic character of the area. Houses in the "tank lots" and Faye Road to be reserved for short-term rentals. Enforce "Kōke'e Vernacular" design guidelines. Establish maintenance fees for infrastructure.

- Develop new homes on vacant lots. Follow "Kōke'e Vernacular" design guidelines.
- Repair and resurface Kōke'e Road. Pave collector roads. Repair and re-gravel local roads serving recreation residences. Repair Camp 10 Road for backcountry access. Connect Faye Road and Halemanu Road across Koke'e Stream.
- Enhance park identity and visitor orientation. Develop Lodge area as a "main street" layout with new Park HQ, Lodge, and Education Center buildings separated by landscaped spaces, and served by storefront parking and covered boardwalk connection.
- Re-develop CCC Camp for use as research / interpretive center and hostel.
- Develop trail hubs at Halemanu, Camp Sloggett, Awa'awapuhi Trail Head, Pu'u Hinahina and Park HQ with interconnecting trail system.
- Develop new, lower elevation canyon lookout.
- Establish revenue enhancement program, including entry fee and improved concession facilities at lookouts and Kanaloahuluhulu.
- Renovate and upgrade utilities and infrastructure.
- Monitor park use and users to establish resource limits.

2.5 PREFERRED ALTERNATIVE

The preferred master plan alternative is based on the "Remedial Improvement" alternative. Improvements are generally limited to repairing and upgrading existing facilities, infrastructure and utilities. The objective is to meet regulatory standards and to enhance the park users' experience by improving orientation, service, and safety and by eliminating incompatible and obtrusive elements within the parks.

Additionally, several primary destination sites within the parks are identified for redevelopment to address the special demands placed on them. These sites include Kanaloahuluhulu Meadow and the four major lookouts: Pu'u o Kila, Kalalau, Pu'u Hinahina, and Waimea Canyon Lookout. See Figure 2-2, Master Plan.

DESIGN PRINCIPLES

Planned improvements will be concentrated within existing developed areas along the Kōke'e Road corridor in order to minimize the development "footprint" on the natural landscape. Exceptions include construction of a new park entry gate at the entrance to Waimea Canyon State Park, and development of a new lower elevation lookout on Waimea Canyon Road.

Man-made elements are subordinate to the natural landscape. Structures are to be located away from primary view zones, set back from roadways and screened from view where appropriate.

Natural materials are to be used to preserve the parks' rustic character and blend into the wilderness landscape. Materials may be finished or unfinished depending on location and function of the structure.

◆ LANDSCAPING & VEGETATION

Over time, the activities of the recreation residents have produced a mosaic of several distinct landscape typologies. Though each typology expresses a different relationship with the land, there is an apparent shared landscape characteristic of open lawn space defined and accented with natural and introduced tree plantings. This landscape feature is emblematic of Kōke'e and evident throughout the public

spaces and lease lots within the two parks. It is most prominently displayed in the open meadow space and monumental trees of Kanaloahuluhulu.

Landscape design based on these typologies is appropriate for the "settlement" areas within the park, such as at Kanaloahuluhulu Meadow and within the recreational residential areas where people have asserted a human presence. Outside of the settled areas, the natural landscape should prevail.

Landscaping at facilities which are developed to showcase the natural beauty of the parks, such as the lookouts and trailheads, should be designed to blend into the "wilderness" setting. Native plant materials and massings, local earth forms, and color and texture palettes drawn from the immediate vicinity should be used in the design.

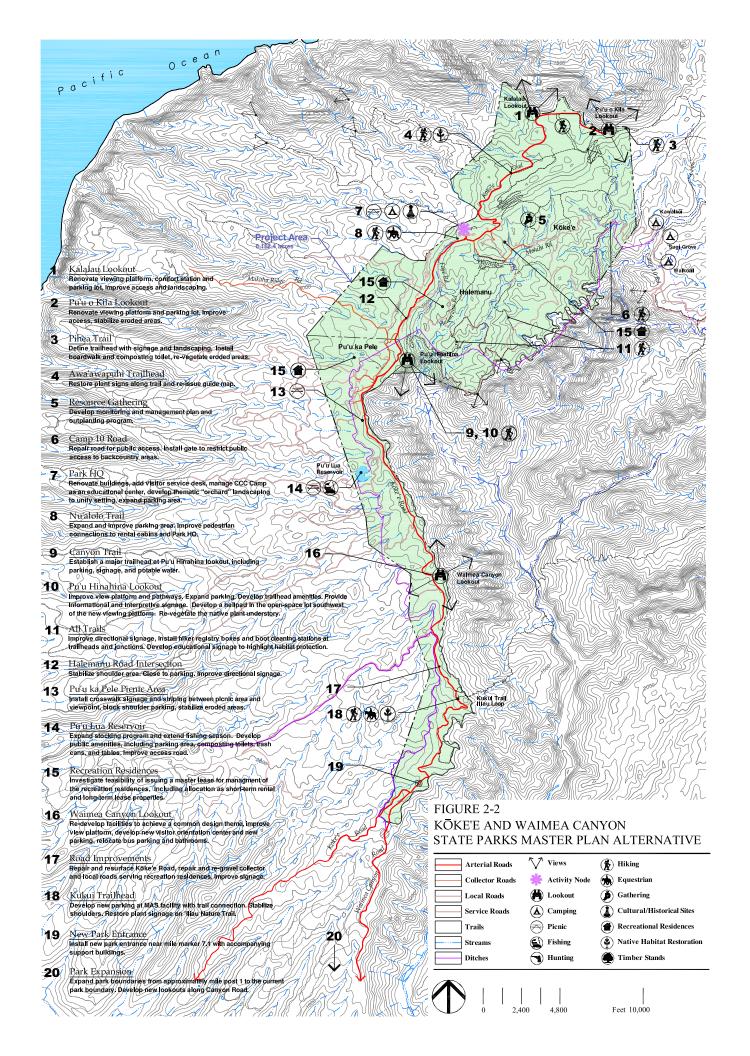
PARK ENTRY

A new park entry is planned for the entrance to Waimea Canyon State Park. The entry is an essential component of the master plan. It will serve to:

- Control access for park safety and resource management;
- Orient and inform park visitors; and,
- Establish park identity and ranger presence.

◆ ROADS

Roads are categorized as Arterial (Kōke'e Road, Waimea Canyon Drive, and Kekaha Road), Collector (Waineke Road, Makaha Ridge Road), and Local (recreation residence access, Camp 10 Road). Improvements include:



- Repair and resurface the entire length of Kōke'e Road to Pu'u o Kila. Stabilize shoulders, install road-surface reflectors.
- Re-grade, gravel, and correct drainage on unpaved collector roads.
- Re-grade, gravel, and correct drainage on local roads serving recreation residences.
- Repair Camp 10 Road for public access, including re-grading and graveling, and improving stream crossings.
- Improve identity and directional signage at key intersections.

♦ TRAILS

Recommendations and planned improvements planned for the trail system include:

- Improve identity and directional signage at all trailheads and junctions.
- Update trail guide materials and trailhead signs to inform visitors of trail conditions and amentities.
- Expand or improve parking at Kukui Trailhead Nu'alolo Trailhead, and Awa'awapuhi Trailhead.
- Update informational and interpretive materials for Awa'awapuhi Trail, Iliau Nature Loop, and Kanaloahuluhulu nature loop trail.
- Complete construction of Ditch Trail and Cliff Trail segments with connection to Pu'u Hinahina.
- Develop new trailhead facilities at Pu'u Hinahina.
- Develop new ADA accessible interpretive trail at Kahuama'a Flats.
- Install boardwalk / steps along the valley rim between Pu'u o Kila Lookout and Pihea Overlook to control erosion.
- Consider elevated canopy trails in the forest.

◆ KANALOAHULUHULU MEADOW / PARK HEADQUARTERS

Kanaloahuluhulu Meadow is the heart of Kōke'e and a primary park visitor destination. The meadow area serves several valuable park functions:

- Park Identity / Landmark
- Ranger Presence / Visitor Service
- Park Community / Social Center
- Research / Education Center
- Revenue Generation Center

Proposed improvements include:

- Renovate or construct new Kōke'e Lodge building. Possibly integrate visitor center, museum, concession, and visitor lodging in single lodge complex.
- Establish and enforce Kōke'e vernacular architectural design standards in the meadow architecture.
- Continue to lease Kōke'e museum operations to a non-profit organization, such as Hui o Laka.
- Expand the existing museum building to create space for a visitor service desk to be staffed by a uniformed DSP ranger or docent.
- The service desk will provide the following services:
- One-stop location for all park permits (camping, gathering, fishing, hunting, commercial trail use).
- Reservations and check-in/out for shortterm State rental cabins.
- Visitor orientation and information.
- Complaints, reports, and emergency communications.
- Renovate the historic Park Manager's House to serve as the new Park HQ.
- Develop orchard landscape theme based on historic CCC Camp plantings. Extend orchard plantings along the north edge of the meadow to provide a unified landscape

- context for the park buildings Park Manager's House, Kōke'e Lodge, Kōke'e Museum, and Judd Picnic Pavilion.
- Expand Parking along the edge of the Meadow between the Judd picnic pavilion and tent campground.
- Continue use as an educational center and field station for natural and historic resource research and management.
- Maintain existing cabins for short-term rental use. Outsource rental cabin operations and maintenance through lease to a private / non-profit organization.
- Redesign intersection to meadow.

♦ LOOKOUTS

General

- Replace all cesspools with septic systems or composting toilets as appropriate to the location.
- Develop potable water system (except at Pu'u o Kila).
- Improve informational and directional signage and interpretive materials.

Waimea Canyon Lookout

- Re-develop visitor facilities, including viewing platforms, bathrooms, concession area, new information center, and landscaping, to achieve a cohesive design.
- Re-develop the existing parking area as a pedestrian drop-off and handicap parking only zone. Develop a pedestrian view plaza between the view platform and comfort stations.
- Develop a new parking lot and bus staging area at the lookout driveway entrance.
 Relocate bus parking to the new parking area.

Pu'u Hinahina Lookout

 Develop a lookout plaza at the convergence of the pathways and Cliff Trail and redevelop the pathways to both the Waimea

- Canyon and Ni'ihau viewing platforms to comply with ADA accessibility requirements.
- Construct a new ADA accessible comfort station in the lookout plaza between the parking lot and canyon viewing platform.
- Develop trailhead facilities and signage for the Cliff Trail.
- Develop a new parking lot to serve the trail head.

Kalalau Lookout

- Realign Kōke'e Road to create a stopcontrolled T-intersection at the entrance to the Kalalau Lookout parking lot with righthand turn towards Pu'u o Kila.
- Improve pathway system to comply with ADA accessibility requirements.
- Relocate comfort station to edge of open lawn area.
- Identify location for package plant septic system leach field (potential in center lawn of parking area).

Pu'u o Kila Lookout

- Reconstruct and restripe parking lot.
- Provide composting toilets in parking lot area.
- Improve walkway from parking lot to viewing platform and Pihea Trailhead.
- Renovate viewing platform to provide direct access to Pihea Trail along valley rim alignment.

Lower Elevation Lookouts

- Develop a new lookout at mile marker 4.5
 on Waimea Canyon Drive with a vantage of
 the canyon uplands, Waimea River,
 irrigation ditch system, and lower elevation
 agricultural practices. Showcase taro
 cultivation at the edge of Waimea River
 below lookout.
- Develop typical amenities, including parking, ADA accessible pathways and

- comfort station, and interpretive signage and kiosk.
- Extend Waimea Canyon Park boundary to include new lower elevation lookout

RECREATION RESIDENCES

The recreation residence lots will remain in recreational use following the termination of the current leases. The Division of State Parks is currently analyzing the following alternatives:

- Issuing a master lease for recreation residences in Kōke'e and Waimea Canyon State Parks;
- 2) Designating the area as an historic district to allow direct negotiation with current lessees.

If neither option is adopted by the BLNR, the recreation residences will be auctioned at the start of 2007. The value of the leases is to be determined by appraisal. The BLNR will also consider a provision to have new lessees compensate former lessees for improvements.

♦ UTILITIES

Electrical System

• Replace electrical system distribution lines.

Wastewater System

- Expand the Kanaloahuluhulu leach field to handle periods of high rainfall.
- Replace all large capacity cesspools (20 or more users) with waste water collection and treatment system.
- Connect all recreation residences within the well head protection zone to a waste water collection and treatment system.
- Establish user fees to pay for operations and maintenance costs.

Water System

- Replace existing water transmission and distribution system. Extend water transmission lines to Pu'u Hinahina and Waimea Canyon Lookouts
- Continue exploration for potable water source development.
- Develop a replacement and backup source of potable water. Construct a second water tank at the main storage area.
- Install water meters for all major users.
- Develop water supply, including dip tanks, for fighting wildland fires.

Communication System

 Install solar powered emergency call boxes at the major lookouts and trail hubs.

◆ PARK MANAGEMENT / OPERATIONS

Management recommendations represent a range of alternatives to address opportunities and constraints identified in the background research and through input from task force members and the public.

- Create a Kōke'e Regional Authority under DLNR that incorporates the functions of all of the divisions which operate in Kōke'e and Waimea Canyon State Parks and the surrounding forests and natural areas.
- Create a single DLNR interface through which the public can obtain permits for camping, hunting, fishing, gathering, and commercial uses.
- Review park services, including utility, maintenance, and visitor services, to determine which services can be privatized.

MONITORING PROGRAM / LIMITS OF ACCEPTABLE CHANGE

 Develop a monitoring program to record changes to park conditions over time. Develop a list of indicators to be used to measure conditions of natural resources, facilities, infrastructure, and rates of use.

◆ EDUCATIONAL / INTERPRETATIVE PROGRAMS

- Develop a coordinated information program among the DLNR divisions to ensure that visitor information and materials are consistent.
- Develop a park-wide Archaeological and Historic Resource Management Plan to set priorities, establish standards for interpretive materials, and ensure consistency of information.
- Use the CCC Camp facilities to conduct educational programs on cultural activities in Kōke'e, including traditional Hawai'ian practices as well as cultural practices of Kaua'i's other ethnic groups.

◆ PUBLIC SERVICE

- Continue to provide State support for annual cultural events, such as the Emalani Festival and Banana Poka Roundup.
- Establish a uniformed ranger / docent presence in Kōke'e and Waimea Canyon State Parks to reinforce the parks' identity.

♠ REVENUE

Proposals for revenue generation include:

- Entry Fee Charge an entry fee for park visitors. Hawaii residents will be exempt from entry fees.
- User Fees User fees should be charged to park tenants, concessionaires, and lessees to recapture the true costs to operate and maintain water, sewer, electrical and road systems.
- Lease Rents and Rental Fees Lease rents from recreational residents, group camps, and concessionaires and daily rental fees

- from short-term cabins will be determined following completion of the financial feasibility study of a master lease concept.
- Concession Fees Reassess concession fees, from Kōke'e Lodge, and Waimea Canyon Lookout and Kalalau Lookout lunch wagons.
- Miscellaneous Permits Special use permit rates (gathering, hunting, fishing) should be adjusted to capture costs of maintaining the impacted resource.
- Request funds from the State's fuel tax.
- Request a surcharge on rental cars to pay for road improvements.

SECTION 3 EXISTING CONDITIONS

3.1 ENVIRONMENTAL SETTING

♦ CLIMATE

Temperatures in Kōke'e and Waimea Canyon State Parks vary greatly. The cool upland regions of Kōke'e regularly measure in the 60°s F (degrees Fahrenheit). The average recorded temperature in Kōke'e during the hottest month (August) is 67° F; during the coldest month (February) it averages 51° F. The highest temperature recorded at Kanaloahuluhulu Meadow is 90° F, and the lowest 29° F (DBEDT, 2001). Frost formation is common during the cooler months in the parks' upper elevations.

Temperatures in Waimea Canyon are warmer than the uplands and canyon rim. In the lower reaches of the Canyon, temperatures average in the mid-70°s F annually, with average maximum temperatures in the mid-80°s F and average lows in the mid-60°s F (DBEDT, 2001). Temperatures within the canyon exhibit a great deal of local variation, affected by floor elevation, canyon-channeled winds, shading, heat absorption in the rocks, and other factors.

Moisture gradients within the two parks are some of the most extreme in the world. Within a single scenic vista can be seen montane and wet forest covered ridges as well as dry, desert-like canyons and cliffs. Mt. Wai'ale'ale' and the wet interior of the Alaka'i plateau are visible from Kōke'e and Waimea Canyon State Parks, as are the dry lowlands of Waimea Canyon. Within the park boundaries, average rainfall varies from 118 inches at Pu'u o Kila Lookout (elevation 4,160 feet), to 59 inches at the Kōke'e State Park entrance (elevation 3,600 feet), to 39

inches at the entrance to Waimea Canyon State Park (elevation 2,100 feet).

♦ PHYSIOGRAPHY AND GEOLOGY

Waimea Canvon State Park is linear in shape, occupying a narrow ridge along the western rim of Waimea Canyon between the 2,100-foot continuing elevation and up-slope approximately 7 miles to the entrance to Kōke'e State Park near the 3,600-foot elevation. The park lies within the Pu'u ka Pele Dissected Uplands physiographic division. This division is characterized by its irregular and rolling topography and numerous erosional gullies which drain primarily in a westerly direction. The eastern edge of the park is defined by the Waimea Cliff and Valley division, a highlyeroded land form that drops abruptly to the canyon floor, forming the western wall of Waimea Canyon.

The adjoining Kōke'e State Park begins at an elevation of 3,600 feet and continues for 4 miles in a mauka direction to the edge of Nā Pali overlooking the Kalalau Valley, at an elevation of approximately 4,200 feet. Most of Kōke'e State Park lies within the Alaka'i High Plateau physiographic division. In Kōke'e State Park, this division is characterized by a diverse network of small ridges and streams which flow in a southerly direction towards Waimea Canyon.

Distinct topographic and physiographic characteristics in Kōke'e State Park occur along two of its borders. The first occurs along Nā Pali, where the park overlooks Kalalau Valley. Steep cliffs dramatically separate the Alaka'i High Plateau from the Nā Pali Coast and

valleys. The second physiographic feature occurs along the southern edge of the Kōke'e State Park where the Waimea Canyon abuts Kumuwela Ridge, marking the separation between the Alaka'i High Plateau and the Waimea Cliff and Valley formation.

Within Kōke'e State Park, Kaunuohua and Kumuwela Ridges frame the major use areas of the park on the west and east sides, respectively, and mark key geologic stages in the formation of the island. Kaunuohua Ridge is a moderately-pronounced land form, on which are developed several utility installations. Kumuwela Ridge is parallel to the Kaunuohua Ridge but of minor visual significance. The area between these two ridges contains the Kōke'e and Halemanu cabin lots, as well as the main park facilities and most of the infrastructure improvements within the park

WATER RESOURCES

Surface water run-off from Nā Pali Kona Forest Reserve, Alaka'i Wilderness Preserve and Kōke'e State Park are the principal contributors to the Waimea River watershed. Three primary streams originate from the Kōke'e State Park area: these are Halemanu, Kōke'e and Poomau Streams. All three streams flow into the Waimea Canyon, where they merge to become the Waiahulu Stream, which in turn joins with other streams to form the Waimea River. Tributary streams in Kōke'e State Park include Waineke, Noe, Elekeniiki and Elekeninui. See **Figure 3-1**, **Water Resource Map**.

Surface water resources in Waimea Canyon State Park are limited to the Kōke'e irrigation ditch system and Pu'u Lua Reservoir. The ditch system leaves the park near the southern entrance and connects with Kitano Reservoir, before discharging into Waimea Canyon where it joins the river. Seasonal stream flows also occur in the valley drainages on the westward-

facing slope during incidents of heavy rain, but these flows are intermittent and do not contribute to the Waimea River watershed.

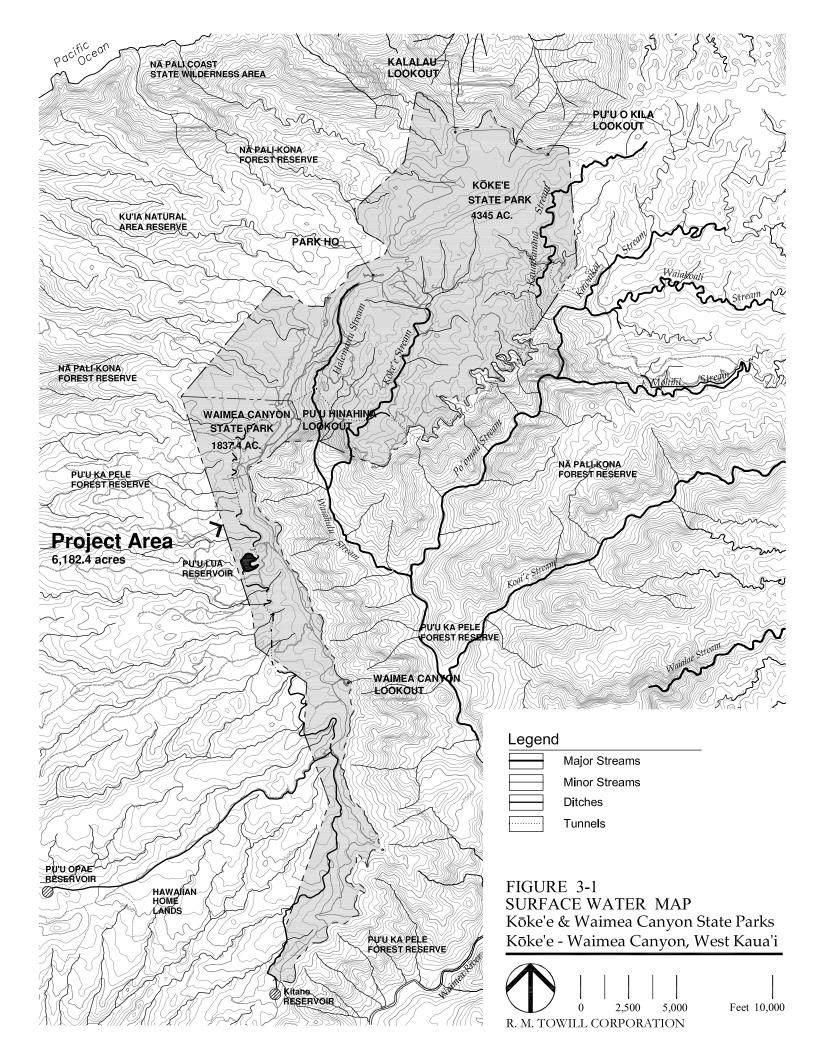
Spring sources occur throughout the parks, with flows responding to rainfall levels. The Kōke'e Air Force Station (AFS) has developed one such spring as a potable water source. Other small and privately-operated water sources utilizing wells and surface water are located in the Kōke'e, Halemanu, and Pu'u ka Pele lease lot areas.

The parks are underlain by three distinct aquifer systems: (1) Hanalei aquifer sector / Nāpali System, (2) Waimea aquifer sector / Waimea System, and (3) Waimea aquifer sector / Kekaha System.

All three aquifer systems are characterized as:

- High-level fresh water not in contact with sea water.
- Unconfined the water surface is in the upper surface of a saturated aquifer.
- Dike-contained aquifers are confined in basaltic dike compartments.

They are considered irreplaceable, suitable for potable source development, and vulnerable to contamination. Water quality is addressed in Section 3.7, Infrastructure – Water System.



NATURAL HAZARDS

Earthquake

The Uniform Building Code (UBC) provides minimum design criteria to address potential for damages due to seismic disturbances. The UBC scale is rated from Seismic Zone 0 through Zone 4, with 0 the lowest level for potential seismic induced ground movement. Kaua'i has been designated within Seismic Zone 1. Assigning seismic hazard zones to the island is difficult because ground shaking during a strong earthquake may vary within a small area. This variation is due to the nature of the underlying ground and local topographic conditions

Hurricanes

The Hawaiian Islands are seasonally affected by Pacific hurricanes from the late summer to early winter months. The island of Kaua'i infrequently hit by severe storm events. Kōke'e and Waimea State Parks still show signs of damage caused by Hurricane Iniki, which struck the island September 11, 1992. It is difficult to predict these natural occurrences, but it is reasonable to assume that future events will occur. The project site is, however, no more or less vulnerable than the rest of the state to the destructive winds and torrential rains associated with hurricanes. During a significant storm or hurricane event, direct wind pressure, wind driven debris, and flooding all pose potential hazards to the proposed park facilities. These hazards, however, are not unique to the parks.

Flood Zones

The Federal Emergency Management Agency has not designated any flood zones within Kōke'e and Waimea Canyon State Parks. Proposed master plan improvements are not expected to exacerbate conditions that would contribute to flooding.

Forest Fires

Forest fires are a constant potential hazard in

Kōke'e and Waimea Canyon State Parks, especially during the dry summer months. Kōke'e and Waimea Canyon State Parks are designated as a Fire Management Co-Response area. Under this designation, primary responsibility for fighting fires within the park boundaries falls to the Kaua'i Fire Department (KFD). DOFAW will respond to fires within the parks only at the direct request of the KFD, but retains primary fire-fighting responsibility for Conservation lands outside the park, including the forest reserves, natural area reserves, and wilderness preserve.

Water resources for fighting fires are currently inadequate. Fire fighting response relies primarily on the fire engine stationed at the town of Waimea. The fire engine has a water carrying capacity of 750 gallons and pump rate of 1,500 gallons per minute. To provide 30 minutes of fire fighting capacity for the engine, a 45,000 gallon tank is required. Additionally, aside from Pu'u Lua Reservoir, the parks lack dip tanks for use by helicopters in fighting fires.

♦ AIR QUALITY

Air quality throughout the parks is excellent due to the general absence of pollutant sources and the prevailing winds and rains. Air quality in localized areas, such as Waimea Canyon Lookout and Kōke'e Lodge and Musuem, is occasionally and temporarily impacted by exhaust from concentrated vehicle traffic and idling tour buses. No other significant pollutant sources are known to exist.

♦ Noise

Ambient sound within the parks is generally of natural origin – wind, birds, insects, and running water. Intrusive noise is generated a variety of human activities, including vehicle traffic on park roads, the use of heavy equipment and internal combustion engines in park operations and maintenance activities, the

presence of large groups of park visitors, radio "boom boxes" used by campers and picnickers, gun shots from hunting, and other human activities. Helicopters and airplanes flying over the parks also generate intrusive noise. During the public input process, low-flying helicopters were identified as a nuisance noise source to park users seeking a quiet, wilderness experience, and as a possible source of disruption to forest birds.

◆ BIOLOGICAL RESOURCES

The two parks overlay and are surrounded by large tracts of forest, wilderness, and reserve areas containing some of the most pristine examples of native ecology in the state. Designated forest reserves, preserves, and natural areas within and adjacent to the parks include:

- Ku'ia Natural Area Reserve
- Hono o Nā Pali Natural Area Reserve
- Alaka'i Wilderness Preserve
- Nā Pali-Kona Forest Reserve
- Pu'u ka Pele Forest Reserve
- Mokihana Game Management Area

Fauna

The Kōke'e and Waimea Canyon State Park and surrounding Natural Area Reserves, Forest Reserves and the Alaka'i Wilderness Preserve support a remarkable assemblage of endemic, indigenous and introduced animal species. These include the sole endemic Hawaiian terrestrial mammalian species, the endangered Hawaiian hoary bat, and sixteen endemic avian species or sub-species including 10 which are currently listed as threatened, endangered or candidate species under both the federal and the state of Hawai'i's endangered species programs (DLNR 1998, Federal Register 1999a, 1999b, 2001, 2002). Numerous indigenous migratory avian species have also been regularly recorded within the parks addressed in this plan. Additionally at least 35 introduced bird species are regularly seen within the area.

Flora

An inventory of the rare plant resources in Kōke'e and Waimea Canyon State Parks was undertaken by The Nature Conservancy of Hawai'i (TNCH) in 1996. TNCH uses a global ranking system to assess the rarity of a particular plant species. The ranking system is based on the number of wild populations known to exist globally, the condition of the habitat in which they are located, and the presence of threats to their existence. The global ranking system often correlates with federal "threatened and endangered" designations, but does not connote federal protection status.

Based on the global ranking system, TNCH identified 57 rare plants in Kōke'e and Waimea Canyon State Parks, all but one of which are endemic to the Hawai'ian Islands (TNCH, February 1996). Fifty-four of the rare plants are known from Kōke'e State Park, and 6 are known from Waimea Canyon State Park. Thirty-nine of the plants are considered critically imperilled; that is, only 1 to 5 occurrences are known in the wild. The remainder typically have between 6 and 100 recorded occurrences in the wild.

Native Natural Communities

Natural communities are assemblages of plant and animal species that form an ecosystem under typical environmental conditions of temperature, moisture, and other factors. Natural communities are characterized by elevation zone, moisture conditions, and dominant vegetation type. The Hawai'i Natural Heritage Program identified four native natural community types and one subtype in Kōke'e and Waimea Canyon State Parks, one of which is considered rare (TNCH, February 1996).

Significant Trees and Timber Resources

Within the parks' forest landscape are found individual tree specimens and stands of trees

that are considered significant as exceptional examples of their type, as cherished landmarks, and as constituents of the cultural landscape. These include the historic Sugi Grove, the monumental trees ringing Kanaloahuluhulu Meadow, plantings of methley plum trees and other orchard varieties introduced by the CCC, and two trees designated by the County of Kaua'i as "exceptional".

A variety of timber resources are located on lands within and adjacent to the two parks on lands managed by DOFAW. The primary concentration of DOFAW-managed non-native timber is located within Pu'u ka Pele Forest Reserve, west of Kōke'e Road (State Route 550). Most of the remaining timber acreage is located within Nā Pali-Kona Forest Reserve and Waimea Canyon State Park.

3.2 ARCHAEOLOGICAL & HISTORIC RESOURCES

The Koke'e and Waimea Canyon area has a long and rich history dating back to pre-western contact periods. The two parks contain a wealth of archaeological and historic evidence of early Hawaiian forest resource use, western agricultural activities, and the role of the uplands as a retreat for Hawai'i's turn-of-thecentury elite. The parks continue to play a valuable role in the cultural lives of Kaua'i's residents, serving as a location for annual commemorative celebrations and seasonal resource gathering, and as a "classroom" for passing on traditional practices related to hunting, story telling, crafts, and other local art forms. Today's park community includes numerous families and individuals with long ties to the land. These people provide a valuable touchstone to the history of development in Kōke'e and Waimea Canyon.

The parks contain several recorded archaeological sites, as well as three sites recorded on the National and/or State Register of Historic Places, as listed in the **Tables 3-1 and 3-2** below, and shown in **Figure 3-2**, **Historic and Archaeological Sites Map**.

3.3 SCENIC RESOURCES

Scenic resources include developed lookouts, scenic roadways, and other scenic locations and features. The four developed lookouts, Pu'u o Kila, Kalalau, Pu'u Hinahina, and Waimea Canyon Lookout, are among the most popular visitor destinations within the parks. They former two provide views of the wet upland environment and stunning vantage into Kalalau Valley and the Pali Coast. The latter two offer expansive views into Waimea Canyon and exposure to the drier mixed forest and lowland Waimea Canyon Drive and Kōke'e Road are designated scenic corridors that offer a transitional scenic experience from the dry coastal settlements of Waimea and Kekaha to the wet cloud forests of upper Kōke'e. Scenic locations and features include Kanaloahuluhulu Meadow with its open space, monumental trees, and historic CCC Camp buildings. Other scenic resources include Pu'u Lua Reservoir, Kōke'e Irrigation Ditch, the historic recreational residential communities, significant tree stands, and distant views of Mt. Waialeale, Niihau, and the Nā Pali Coast.

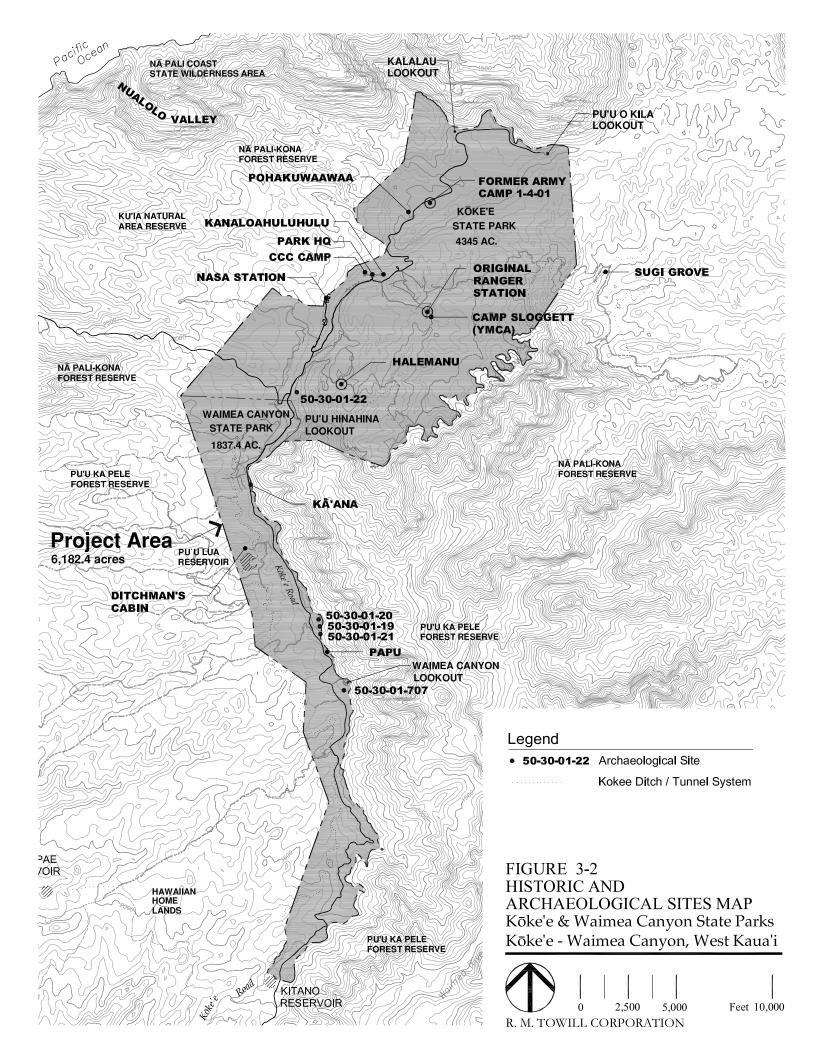


Table 3-1
Recorded Archaeological Sites within Kōke'e & Waimea Canyon State Parks

State No.	Site Description
50-30-01-19	Ahuloulu Heiau - (Thrum, 1906; Bennett, 1931).
50-30-01-20	Pu'u ka Pele House Site – (Bennet 1931).
50-30-01-21	House Site – (Bennett, 1931).
50-30-01-22	Kaunu'aiea Heiau (Kaumuaiea heiau). – (Thrum 1906, Bennett, 1931).
50-30-06-707	Temporary Habitation Site – (Carpenter and Yent, 1993).

Table 3-2 National and State Register of Historic Places Kōke'e and Waimea Canyon State Parks

Site	Site Name	Tax Map Key	Hawai'i	National
Number			Register	Register
30-01-19	Ahuloulu Heiau Complex, Puʻu Ka Pele	1-2-01: 03	6/3/81	_
30-06-9392	Civilian Conservation Corps Camp, Kōke'e	1-4-01: 13 (por.)	9/3/96	12/20/96
30-06-9395	Camp Slogett, Kōke'e	1-4-04: 33	8/31/91	8/5/93
Outside Park	Boundaries			
30-06-33	Taro Terrace and House Sites	1-5-01: 02	6/3/81	_
30-06-35	Waimea Valley Complex	1-5-01: 02, 17	6/3/81	_

Source: State Historic Preservation Division

3.4 RECREATIONAL RESOURCES

◆ FISHING

The Kōke'e Public Fishing Area includes designated streams, reservoirs, and ditches in the Kōke'e State Park. The principal fishing areas are located west of Kōke'e Road centered around Pu'u Lua Reservoir. Designated streams include Koai'e, Mōhihi, Wai'ale, Kawaikōī, Waikoali, Kōke'e, and Kauaikinanā Streams and the entire ditch system. Fishing is prohibited in

Kōke'e Stream and its tributaries above Camp Sloggett. Fishing is one of the most popular seasonal events in Kōke'e and Waimea Canyon State Park. There is strong public support for expanding the season and developing year-round fishing resources.

♦ HUNTING

Public hunting is permitted within certain areas of Kōke'e and Waimea Canyon State Parks, and

throughout the surrounding forest reserves and natural area reserve. Game animals include feral pigs (*sus scrofa*), feral goats (*Capra hirca*), black-tailed deer (*Odocoileus hemionus columbianus*), and numerous introduced game birds.

◆ RESOURCE GATHERING

Many people use the forest to gather plant materials for a variety of purposes. Commonly collected materials include Methley plums, maile, mokihana, banana poka, ferns, dead wood, ginger, and other plants. Collected materials range across the entire landscape. In easily accessible areas, along the roadways and near the recreational residences, forest resources are more vulnerable to over-harvesting and damage from harvest activities.

HIKING

Kōke'e and Waimea Canyon State Parks contain 19 developed trails totaling approximately 40 miles. The variety of trails offer offer dramatically different recreational opportunities to hikers of all skill levels. The trails are maintained by the Division of State Parks and Na Ala Hele. Trails are regularly maintained and passable with the exception of Canyon Trail, Ditch Trail, and Mōhihi Trail. Trail maintenance involves clearing overgrowth of vegetation, controlling runoff and stabilizing soils against Steps and structural elements for erosion. stabilizing the trail may be required in steep sections. See Figure 3-3, Trails Map.

◆ PICNICKING

There are 12 picnic facilities available in Kōke'e and Waimea Canyon State Parks and the surrounding forest areas. Three picnic areas are located in Kōke'e (Kanaloahuluhulu Meadow, Kalalau Lookout, and Cliff Trail Viewpoint) and one in Waimea Canyon (Pu'u Ka Pele Picinic area). The remaining picnic facilities are located

throughout the forest reserve areas and are maintained by DOFAW. Other rest areas are located throughout the park, including the developed lookouts, as well as undeveloped sites along the roadways, though picnicking is not encouraged outside of designated areas.

◆ CAMPING

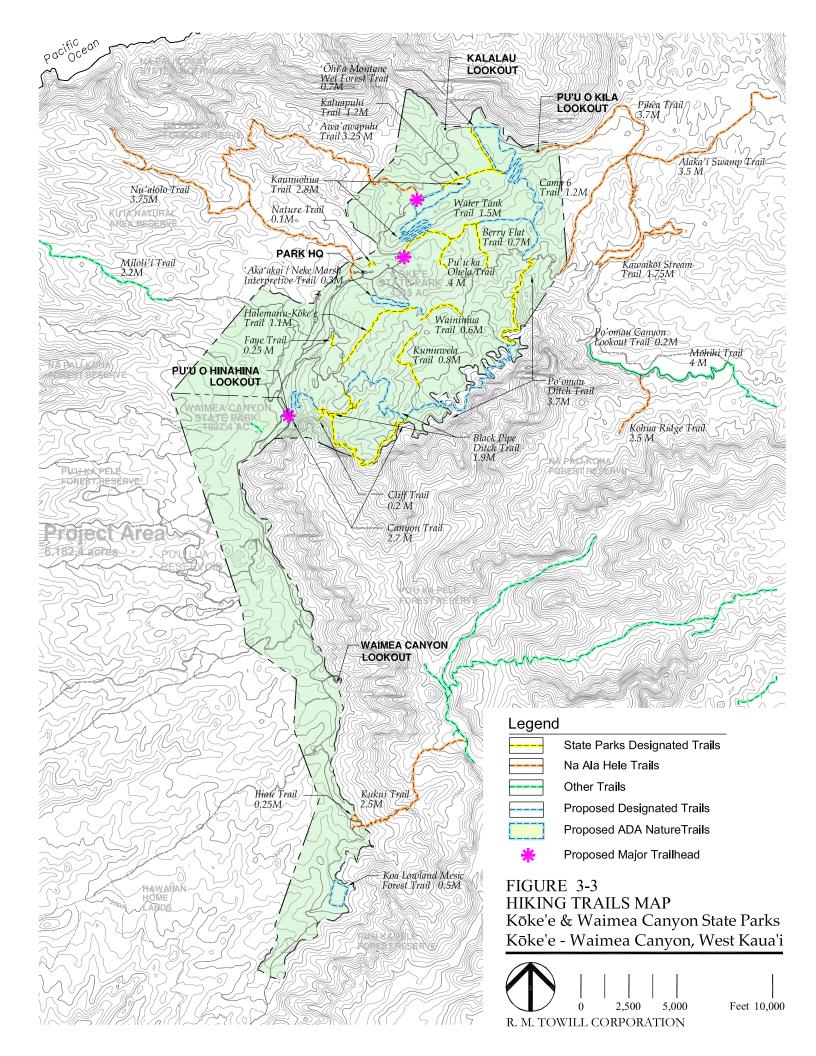
Camping opportunities at Kōke'e and Waimea Canyon State Parks include backcountry camping, individual car and tent camping, individual cabins, and group camping in developed camp ground facilities. The only public overnight tent campground within the two parks is located at the end of Kanaloahuluhulu Meadow. Backcountry camp sites are accessed by trails originating within the two parks, but are located outside of park boundaries in lands managed by DOFAW.

◆ EQUESTRIAN USE

All trails within Kōke'e and Waimea Canyon State Park are open to equestrian use, however equestrian facilities are very limited within the parks. Nearly all of the trails in Waimea Canyon State Park and the lower regions of Kōke'e State Park are well-suited for horse-back riding. Kukui Trail and Nu'alolo Trial in particular are popular with hunters and recreational equestrians:

◆ BICYCLING

Off-road bicycling (mountain biking) is currently prohibited within Kōke'e and Waimea Canyon State Parks. The prohibition is announced on a sign posted at the entrance of Waimea Canyon State Park on Kōke'e Road. Mountain biking is allowed in certain areas within the State Forest Reserves. The paved and unpaved roads throughout the parks are well-suited for bicycle use. Commercial down-hill bicycling is a regular activity on the State



highway outside of the park. Representatives of mountain biking groups have requested access to the park, and development of designated mountain biking trails.

MOTORIZED VEHICLE USE

There are no developed resources for recreational motor vehicles within the parks. Existing unpaved roads are attractive for recreational vehicle use, particularly for 4-WD vehicles and off-road motorcycles. Unpaved roads in Kōke'e are in poor condition and require regular maintenance to remain serviceable.

NATURE STUDY

The unique environment and diverse plant and animal life found in Kōke'e and Waimea State Parks attract many amateur naturalists. Trails throughout the parks provide access to the complete inventory of natural communities, geologic formations, and climatic zones within the parks, and provide an opportunity to encounter rare and endangered plants and animals that inhabit the area.

3.5 RECREATIONAL RESIDENCES

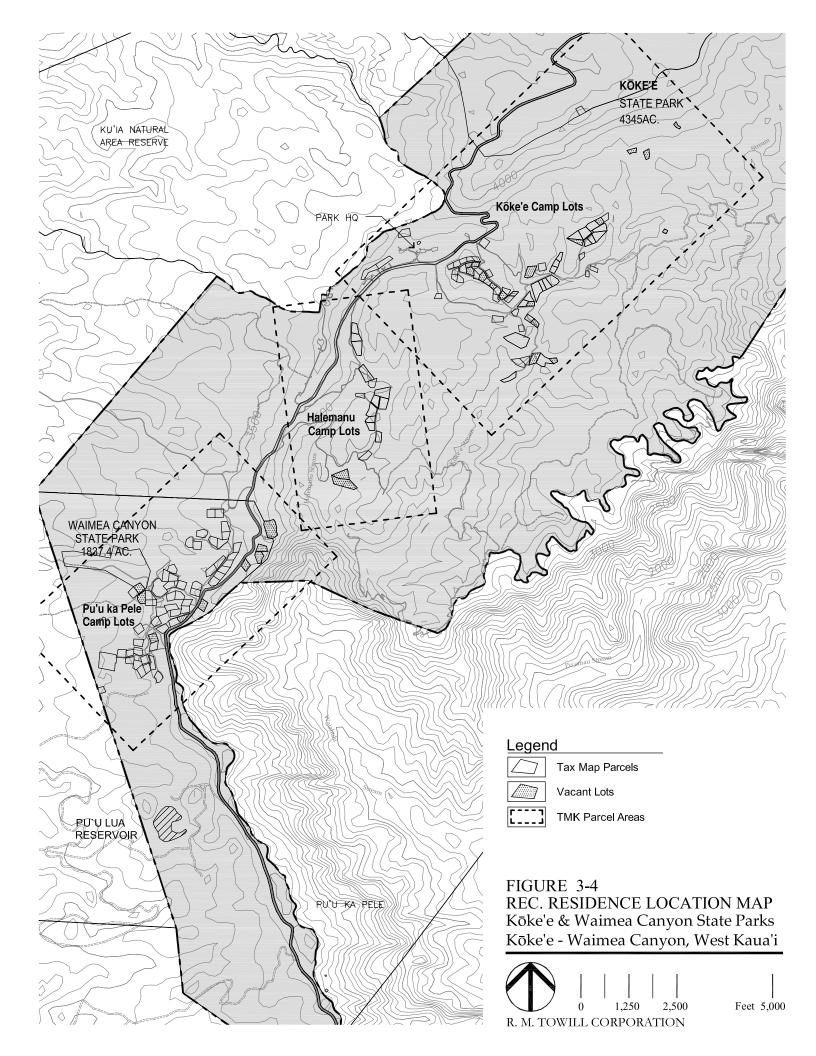
The heritage of Kōke'e State Park as a valued retreat from the urban environment is exemplified by the presence of approximately 110 recreational residence. The residences are clustered into three forested loosely neighborhoods and represent the "residential villages" of the parks. The neighborhoods are picturesque, consisting of wooden cabins with weathered facades, metal roofs, wide porches and chimneys. They are strung together along meandering dirt roads with narrow dirt driveways, nestled into a landscape of natural and modified forest growth and ornamental gardens. The tradition of recreation residences

in the park, their architectural character and the landscape elements they have introduced have created a unique setting not duplicated by any other park in the State Park System.

The recreation residences evolved as the Parks developed and reflect the values brought with the owners. Early lessees of "cabin lots" were associated with the plantation, cattlemen, and business people of Kaua'i. As time passed and as more lots developed, the newer cabins began to change to reflect the time. The recreation residences are not intended for use as permanent residences, but are valued as wilderness retreats and as a place to get away from the heat and routines of life in the lowlands.

The historic significance of the recreation residences has been evaluated twice by the Historic Preservation Division in the recent past. At least 72% of the structures surveyed were considered historically significant and contributed to the cultural landscape. Of the total number of structures, nearly 50 percent were considered to have high historic integrity.

In the spring of 2003, another study to ascertain historic integrity was commissioned by Hui o Laka and the Kōke'e Leaseholders Association. As with the study conducted by the Historic Preservation Division, more than 50% of the buildings assessed by Duensing were found to have high level of historic integrity (Rating 3, 4, and 5). See **Figure 3-4**, **Recreational Residence Location Map**.



3.6 PARK BUILDINGS AND OTHER FACILITIES

◆ STATE CABINS

Twelve rental cabins, owned by the State, are operated and maintained by Kōke'e Lodge. The cabins are arranged in a row located to the south of the Lodge. The cabins are constructed of wood and have corrugated metal roofs painted red. The structures are not of a single style. The cabins are semi-furnished with beds, bedding, linen, kitchen and utensils. The cabins are also provided with potable water, electricity and hot and cold running water. The Lodge, however, is not charged for water used. The Lodge reports that occupancy at the cabins is nominally 100%, or always filled. Busy periods are during holidays and fishing season.

◆ CCC CAMP

The Civilian Conservation Corps (CCC) camp in Kōke'e was built in 1935 to house workers as part of President Roosevelt's effort to provide employment and undertake public works projects during the depression years. In 1943 when the CCC was disbanded because of the outbreak of World War II, the Kōke'e Camp became headquarters for men of the 443rd Aviation and Construction Battalion.

After the World War II, the camp was used by community and church groups, when in 1966 the site was used by the Job Corps program until 1973. The camp was subsequently used by the Youth Conservation Corps till 1982. Following the destruction of Hurricane Iwa in 1982, the camp was used for interagency conferences. In the years following, the camp was abandoned.

In 1990, the non-profit organization Hui o Laka proposed camp renovations and established the Kōke'e Natural History Museum administrative offices at the CCC Camp. Through efforts of Hui o Laka and the Division of State Parks, the CCC camp was placed on the State and National Register of Historic Places in 1996.

The Camp consists of a compound of singlestory board and batten structures surrounding a square, grassed courtyard. The buildings house barracks-like dormitories, commissary, administrative buildings, bathhouse, and various utility buildings.

♦ Kōke'e Lodge And Museum

Kōke'e Lodge

Kōke'e Lodge started as a "country store" constructed out of material recovered during the demolition of the Army camp (across the Awa'awapuhi Trail) in 1950. The original building has been modified over the years to include an extension in the front and ramps to allow access to the handicapped. The building is approximately 4,000 square feet under roof. The current lease was originally executed in 1983 for a period of 20 years. However, the terms of the contract were modified in 1998 to provide for annual renewals to the end of the term. Kōke'e Lodge represents a significant revenue generating source in Kōke'e and Waimea Canyon State Parks.

Ranger Cabin

In addition to the Lodge, the former Ranger cabin and adjacent facilities are part of the Lodge assets and contract. The Ranger cabin is used by the Lodge's Resident Manager. The adjacent buildings are used for: a) wood storage, b) laundry for house-keeping, and c) general storage.

Kōke'e Museum (Hui o Laka)

Hui o Laka operates the Kōke'e Natural History Museum located at the Kanaloahuluhulu Meadow. The Museum uses building number 2 at the CCC Camp for its administrative offices. The museum building was built at the same time as the Kōke'e Lodge. Since 1986 the Museum has been operating under an agreement with the Division of State Parks to "provide interpretive visitor services for Kōke'e and Waimea Canyon State Parks." The agreement terminates in 2006.

◆ BASEYARDS

DLNR, Division State Parks operates two base yards in the park. The first is located at Kanaloahuluhulu Meadow adjacent to the Kōke'e CCC Camp. It consists of approximately ½ acre and contains 4 older building and sheds. It is within the Kōke'e CCC Camp historic boundary; however, the buildings are post-1950.

The second base yard is located on the Kaunuohua Ridge adjacent to one of the NASA facilities. The base yard consists of a single metal building and exterior vehicle storage areas. Access is via a paved and secured (gated) roadway that is manned by the U.S. Navy. The site is hidden from public view.

Nurseries

Awa'awapuhi Trailhead.

DOFAW operates a plant nursery for the propagation and plant acclimatizing facility on a three acre site. This site is used to propagate native species for out planting in the Kōke'e area. The facility is also used to grow plants at certain elevations and climate for out planting. The area is fenced to keep out animals such as deer and pigs. DOFAW has plans to expand the site to grow out plants propagated at the site. The expansion is planned to take place east of the existing facility.

Kalalau Rim Out-planting Site

This area is used to out-plant native plants propagated in the nursery. The area is currently 9 acres. The site is fenced to keep out animals such as deer and pigs.

◆ OTHER FACILITIES

Hawai'i Air National Guard 150thAC&W (Kahuama'a Flats)

The Hawai'i Air National Guard 150 AC&W (Aircraft Control & Warning) Squadron operates a site near the 18-mile marker, about 1/4-mile before the Kalalau Lookout on 11 acres of land leased from the State of Hawai'i and a private landowner.. This facility is part of the air defense system in Hawai'i, providing 24-hour air surveillance of Hawaiian skies. A nearby microwave antenna station (MAS), Kōke'e MAS, supports communications and is considered part of the Kōke'e AFS installation.

Kōke'e MAS

This facility occupies a triangular piece of land 1.25 acres in size and located within Waimea Canyon State Park near the Kukui Trail trailhead. The facility is adjacent to State Route 550, near mile mark 9, approximately 7.5 miles down the road from Kōke'e AFS. It is bordered on the west by the Waimea Canyon Road. (USAF, June 1997).

NASA - at Halemanu

Kōke'e Park Geophysical Observatory (KPGO) is a site located just mauka of the 14-mile marker at Highway 550. The Naval Observatory in Washington, D.C., has a charter from congress to monitor earth rotations and to check time standards. Allied Signal Technical Service Corp. is under contract with NASA through the Goddard Flight Center to operate the facility and help fulfill the Naval Observatory's mission

Navy

The United States Navy Pacific Missile Range Facility has two sites located within Kōke'e State Park: a telemetry control facility near the 14-mile marker on Kōke'e Road (Highway 550), and

adjacent radar and instrumentation facilities on Kaunuohua Ridge above Halemanu. It operates a third facility at the end of Makaha Ridge Road in the Nā Pali-Kona Forest Reserve.

DOE - Discovery Education Center

The Kōke'e Discovery Center, constructed in 1994 and operated by the Department of Education (DOE), is located off Kōke'e Road above the Kanaloahuluhulu Meadow. This facility was built for the purpose of teaching environmental education.

3.7 INFRASTRUCTURE

♦ ROADWAYS

The entire study area has approximately 69 miles of paved and unpaved roads. Jurisdiction and maintenance responsibilities of the roadway system are split between the State Department of Transportation (DOT), Highways Division, the DLNR/State Parks Division and the Kaua'i County/Public Works Department. See **Figure 3-5, Roadway Map**.

Existing Paved Roadway (SR 550)

The drive from the Kaumualii Highway into the Waimea Canyon and Kōke'e State Parks originate from two locations. The first and more convenient route from the east is via the Waimea Canyon Road (SR 550). Starting in Waimea town, the road climbs steeply for seven miles where it intersects the Kōke'e Road, just above the present park boundary (milepost 3.8). The alternate route, located to the west, is the Kōke'e Road. It starts its ascent from Kekaha and climbs through Waipio Valley at a less steep incline and is therefore the favored route for tour buses and other heavy vehicles. The roadway is asphalt with lanes averaging 10-11 feet. The roadway does not have any paved shoulders, except at certain pull-off areas. Guardrails are located at various locations. The roadway is not lighted.

Both roads converge at a tee intersection near the 7 mile marker at an elevation of 2300 ft. This intersection is not lighted. From this intersection, the Kōke'e Road continues for another 11 miles through the parks and ends at the Pu'u o Kila Lookout (Milepost 19). Kōke'e Road is the main conduit in both Parks, providing primary access to all points within the parks and surrounding forest reserves and natural areas.

The Makaha Ridge Road is the only other paved road within the study area. This road is approximately 4 miles long and ends at Pacific Missile Firing Range (PMRF) facilities operated by the U. S. Navy. The road is maintained by the military.

Unpaved Roads

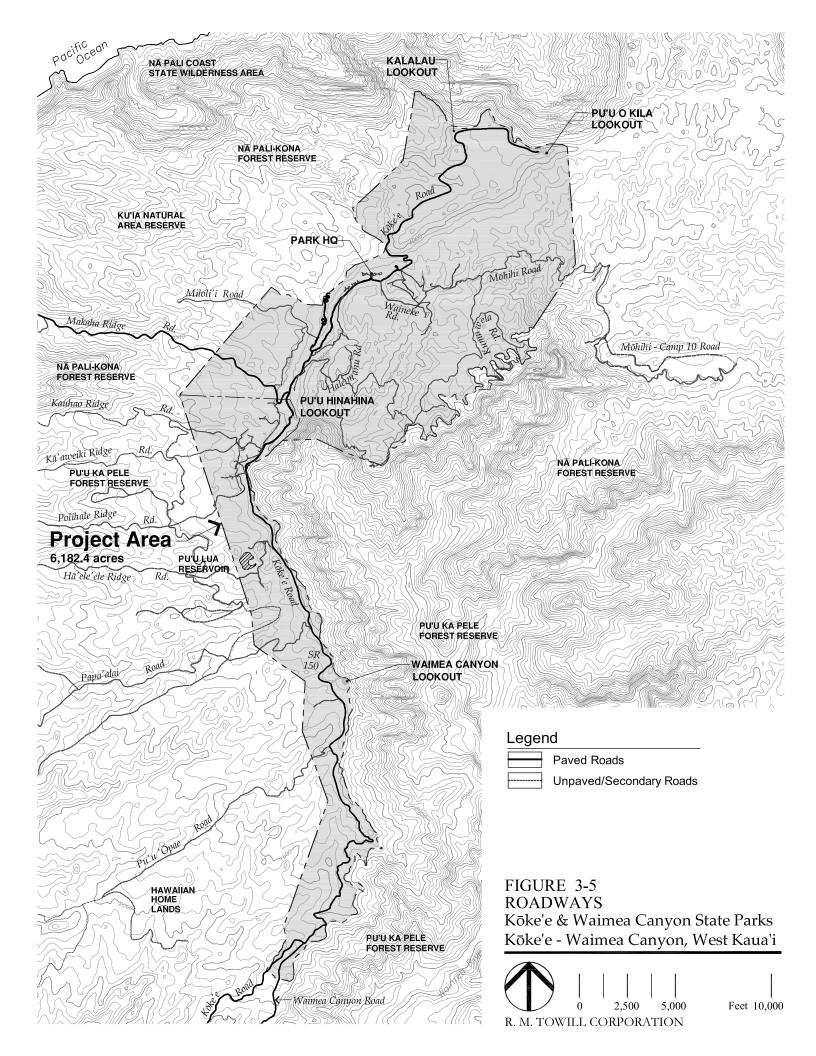
The majority of the Kōke'e study area is served via a series of unpaved dirt-gravel roads. An approximate total of 49.5 miles of roads provide access to various parts of the study area, excluding driveways and service roads. The longest is the Mōhihi-Camp 10 road covering approximately 8 miles. Of the 49.5 miles, approximately 10 miles of roads are used to access the lease lots.

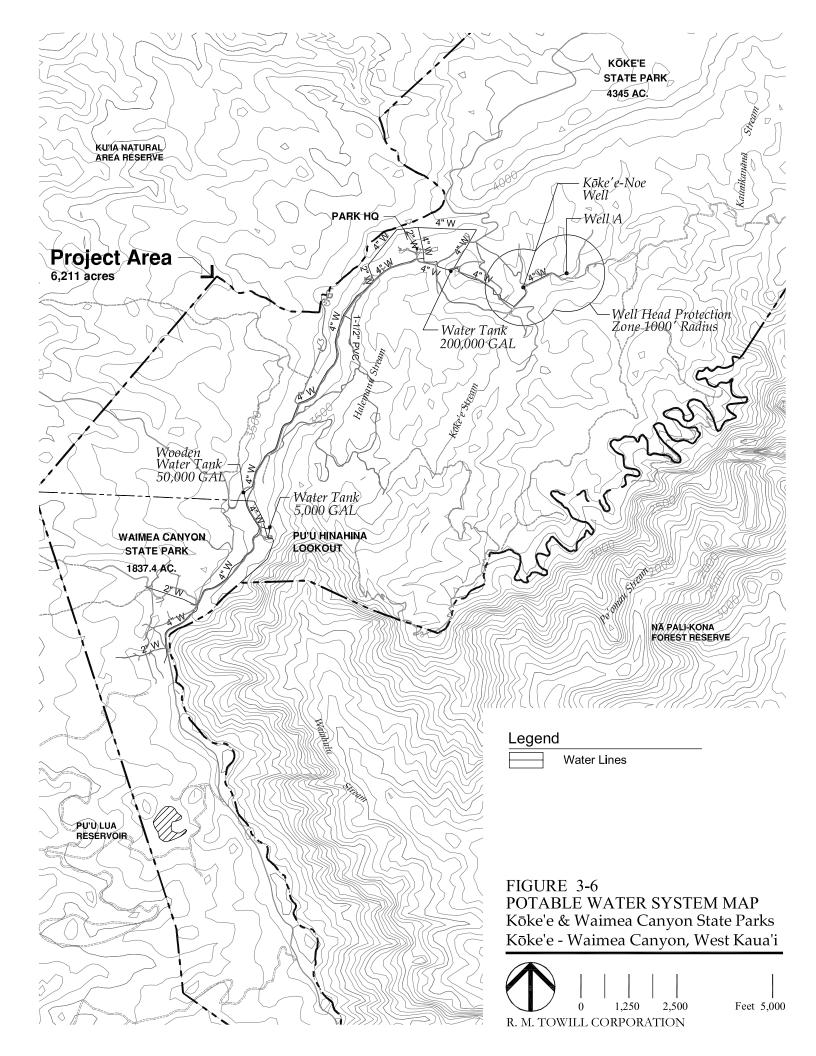
◆ WATER SYSTEM

Kōke'e and Waimea Canyon State Parks are serviced by two water systems, one for potable water and one for non-potable irrigation water. See **Figure 3-6**, **Potable Water System Map**

Potable Water System

The existing potable water facilities (Public Water System No. 425) in the Kōke'e Park





consist of two wells, pumps and chlorination system, a 200,000 gallon storage tank (elevation 3,760 feet above sea level (asl)) and a distribution system that includes most of the developed areas within the Park boundaries.

State Well No. 2-0739-01, is located at 3,560 feet elevation. A second well is located at approximately the same elevation. The maximum yield per well is estimated at 50 gallons per minute (Commission on Water Resources, 2002). The water from both pumps feed to a 200,000 gallon storage tank located within the Kōke'e lease lots.

A water line from the main storage tank feeds a 5,000 gallon tank (elevation 3,500 feet asl) at Pu'u Hinahina and a 50,000 gallon tank (elevation 3,580 feet asl) at Makaha Road that services the lots in the Pu'u ka Pele area. The potable water system is designed to accommodate 2,000 persons and currently has 130 service connections (communications from State Parks). The Kōke'e Air Force Station and the Kalalau Lookout are serviced by a separate well operated by the Air Force.

Based on available meter reading data between January 1999 to January 2001, a total of 12,918,024 gallons was used by metered users. An additional 265,000 gallons per month was estimated to be used, on average, by the nonmetered users which include the Kōke'e Lodge, its maintenance facilities, laundry, and the Discovery Center.

Water Quality

The existing potable water system wells are located in a basin along the Mōhihi Road in the vicinity of Elekeninui Stream. The wells are at a depth of approximately 39 +/- feet below ground level. The existing aquifer is a perched system. The potable water system is monitored two times a week by a private contractor as follows:

- Coliform monitoring program
- Lead and copper monitoring program
- Chemical monitoring by the Safe Drinking Water Branch
- Phase II and Phase V monitoring program

The quality of the water from the wells is much better than the surface catchment system previously used and currently meets DOH standards based on monthly data. The system is currently being studied by the Division of State Parks to ascertain if the wells are impacted by surface flows. Further, traces of lead have been detected in the system and the source is being investigated by the Division of State Parks. The study will be used to plan and develop a water treatment system.

Kōke'e Irrigation System

The Kōke'e-Waimea area has three ditch irrigation water systems: the Kōke'e, Kekaha, and Waimea Ditch Systems. The system was originally built to provide for the water needs of the sugar operations in the low lands surrounding Waimea and Kekaha. The irrigation water system currently serves the diversified agricultural users located in the Kekaha Agricultural Park. The system is managed by CEATECH HHGI Breeding Corp.

The **Kōke'e** ditch, completed in 1926, intercepts flow from the Mōhihi, Waiakoali, Kawaikōī, Kaua'ikananā, Halemanu and Kōke'e Streams at a peak altitude of approximately 3,400 feet. The Kōke'e system consist of a 21-mile collection and conveyance system including 48 tunnels averaging 1,000 feet in length, with the longest being 3,000 feet. The system also includes a 260 million gallon reservoir (Pu'u Lua), a second 63 million gallon reservoir (Pu'u 'Ōpae), and a third reservoir (Kitano Reservoir) located 2.5 miles south of the Pu'u Lua reservoir. The Waimea Canyon Lookout comfort station is provided with non-potable water from the

Kōke'e Ditch system via a 10,000 gallon wooden water tank.

The **Waimea** System, constructed in 1903, diverts portions of the flow of the Waimea River from the at an elevation of approximately 200 feet and travels through open ditches to the west side of the River for approximately 3 miles to the coastal plains north of Waimea town, and for another 4 miles to the west.

The **Kekaha** system, built in 1907, diverts water from the Koai'e and Waiahulu Streams and conveys the water to irrigation system in Waimea.

◆ SEWER SYSTEM

Existing Collection and Treatment

Cesspools are the primary method for disposal of wastewater within the Waimea Canyon and Kōke'e State Parks, and are presently utilized at all leased cabin lots. The only treated sewer system in the park is located near the Kōke'e Lodge. The treatment system utilizes a leach field system with a design capacity of 12,000 gallons per day. Current utilization is approximately 3000 to 4,000 gallons per day. The system services the Kōke'e Lodge, the Kōke'e Museum, the stone picnic pavilion, comfort station in the camping area, and the 12 rental cabins.

The current system is designed to pump the effluent up to the leach field for treatment. During power outages the system shuts down. During periods of high rainfall, the leach field cannot operate properly because the ground becomes saturated.

The Environmental Protection Agency (EPA) instituted Underground Injection Control regulations on December 7, 1999 which prohibit the construction of new large-capacity cesspools. The ban on large-capacity cesspools, to be

implemented on April 5, 2005, will impact the operations at the Park. The known facilities with large-capacity cesspools include: Waimea Canyon Lookout, Pu'u Hinahina Lookout, Kalalau Lookout, Pu'u ka Pele Picnic Grounds, CCC Camp, NASA facility, and Air Force facility. In addition to these sites, private systems have been developed at the private camping sites operated by the YWCA, Methodist Camp, Boy Scout Camp, Hongwangi Camp, Seventh Day Adventist Camp, and United Church of Christ Camp.

Another reason for the conversion of the existing cesspools to a treatment system is that failures to the cesspools could result in contamination of the ground water. The lots which are located near the water wells may pose are risk if there a failures of their cesspools. Therefore, a well-head protection zone of 1,000 feet has been established in which no wastewater effluent, treated or not, may be discharged.

◆ EXISTING POWER AND COMMUNICATIONS SYSTEM

Primary electrical and telephone services are provided by public utility companies (Kaua'i Electric and Verizon Hawai'i). These services are available from overhead lines located along Kōke'e Road and in the recreational cabin areas. Not all lease lots are connected to the power grid. Another power facility along the Kōke'e Road is the Kaua'i Electric substation located at approximately a half mile before the Kukui Trail.

Public phone service is limited to pay phones at the Kōke'e Lodge and at Pu'u ka Pele picnic area. Celluar phone coverage is unreliable through most of Waimea Canyon State Park, and unavailable in Kōke'e State Park past the intersection of Kōke'e Road and Halemanu Road.

Verizon Hawai'i Communication Tower at Pu'u ka Pele.

The Verizon Hawai'i antenna stands high atop Pu'u ka Pele. This repeater site provides services to the Pacific Missile Firing Range at Barking Sands and Kukuiolono. The site also provides communications links for the NASA facility and the Navy facilities in the Park.

Kukui Communication Facility

This facility consists of a 180-foot high communication tower surrounded by several buildings that contain repeater equipment owned by federal, state and county agencies. This facility is located within a 1.25 acre parcel situated along the west side of Kōke'e Road at about the nine-mile marker.

3.8 PARK USERS / DEMOGRAPHICS

Kōke'e and Waimea Canyon State Parks host approximately 350,000 overseas visitors each year (DBEDT, Data Book 2001). The average Kaua'i visitor tends to be middle-class to upper middle class with a higher level of income. In 2001, more than 50 percent of the visitors to Kaua'i had incomes greater than \$70,000. Kaua'i 's profile is on par with the State averages (DBEDT, Visitor Survey, 2001).

The parks are immensely popular with local residents. Data on the number of local residents visiting the parks is very limited. Hui o Laka annually draws resident visitors to the parks to take advantage of programs it offers. In its most recent operating year, 2001-2002, the organization recorded the following:

School Excursion Support (10 months):
 113 Adults
 976 Children

- Audubon Christmas Bird Count:
 - 35 Volunteers
- Custom Hikes:

68 participants

• Wonder Walks Guided Hike (25 hikes):

267 hikers

• Emalani Festival:

2,600 participants

• Kōke'e Resource Conservation Program:

9,141 volunteer days

(59% local, 41% visitors)

4,220 overnites at the CCC Camp

Park user and use information is lacking for most activities in the Parks and study area. Most of the information obtained is anecdotal as regular data collection is not undertaken.

SECTION 4 OVERVIEW OF ANTICIPATED IMPACTS TO BE COVERED IN THE DEIS

Some of the anticipated environmental impacts are short-term and some are long-term in nature. In most cases, it is possible to mitigate adverse environmental impacts and construct projects within acceptable limits. The remaining adverse environmental impacts are counterbalanced by the essential benefits provided to the general public by the proposed improvements.

◆ SHORT-TERM IMPACTS

Short-term impacts that might result from implementation of master plan improvements include:

- Construction-related noise, dust, and exhaust from work activities, the operation of heavy equipment and concentrated presence of internal combustion vehicles.
- Construction-related visual impacts in localized areas. Construction activities, signs and nighttime lighting has the potential to obstruct scenic vistas create visual distractions.
- Temporary closure or interruption of park facilities during construction which would affect park visitors.
- Disturbance of park fauna due to loud noise, lighting, dust, and other constructionrelated conditions.
- Impacts to plant species from project activities that encroach outside the edges of developed areas.
- The introduction of an entry gate and fee might dissuade some local residents who are accustomed to free access to the parks.

◆ LONG-TERM IMPACTS

Long-term impacts relate primarily to increases in the number of visitors attracted by improved recreational facilities. Greater numbers of visitors will place additional burdens on the full spectrum of park resources including infrastructure and utilities; recreational facilities, and natural resources. Potential long-term impacts include:

- Increased vehicle traffic and related impacts to roadways and air quality.
- Increased wear and tear on recreational facilities, including park trails, picnic areas, campgrounds, and lookouts.
- Increased demand for water, sewer, power, and communication services at all park facilities.
- Increases in the number of short-term (daily) rental cabins will raise annual park occupancy rates and place additional burdens on roads, water and sewer systems, and building maintenance.
- Impacts to natural resources, flora, fauna, and sensitive habitats from increased human presence.
- Increased calls for emergency services, including police, fire, rescue and ambulance.

Long-term impacts will also result from permanent changes to the parks' built facilities, including modifications to existing structures, construction of new facilities, and related changes in management, maintenance, and operations of those facilities.

 Where new facilities are constructed, there is the potential for displacement of flora and

- fauna and potential to adversely impact historic or archaeological resources.
- The method of disposition of the recreational residences leases could result in adverse impacts to the residences historic integrity and to their value within Kōke'e's unique cultural landscape.

STUDIES

The following studies will be conducted to assist in the preparation of the Environmental Impact Statement:

- Floral resource field inspection at all sites proposed for development or improvement activities.
- Avi-faunal resource field inspection at all sites proposed for development or improvement activities.
- Archaeological field inspection at all sites proposed for development or improvement activities.
- A History and Architectural Inventory of the Kōke'e Camps and Pu'u ka Pele Lots.
- Cultural Impact Assessment of Kōke'e and Waimea Canyon State Parks.
- An analysis of different management options for the recreation residences, including the concept of issuing a master lease. The analysis will include a financial feasibility study, and comparison of the impacts, costs, and benefits.

SECTION 5 LIST OF NECESSARY PERMITS AND APPROVALS

The following permits and approvals may be required prior to construction of individual master plan projects. As individual projects are budgeted and designed, DLNR will continue its consultation with the appropriate agencies to ensure that all required permits are obtained prior to construction.

Permit or Approval	Government Level	Granting Agency	Why Required
Department of the Army Permit	Federal	U.S. Army Corps of Engineers	Construction of structures or work within navigable waters
401 Water Quality Certification	State of Hawai'i	Dept. of Health	Work near a body of water
National Pollutant Discharge Elimination System (NPDES) Permit	State of Hawai'i	Dept. of Health	Increasing the quantity of any discharge and storm water runoff
Historic Preservation Review	State of Hawai'i	Dept. of Land and Natural Resources	Sites over 50 years old
Conservation District Use Permit	State of Hawai'i	Dept. of Land and Natural Resources	Lands designated by the State as Conservation
Public Land Dispositions	State of Hawai'i	Dept. of Land and Natural Resources	State-owned lands
Stream Channel Alteration Permit	State of Hawai'i	Commission on Water Resources Mgmt.	For projects involving alterations to stream banks.
State Highways Permit	State of Hawai'i	Dept. of Transportation	Construction work within or next to State Highway right-of-way
Non-Covered Source Air Permit	State of Hawai'i	Dept. of Health	Minor source of air pollution (during construction)
Permit to Construct a Wastewater System	State of Hawai'i	Dept. of Health	Construction of waste water system
Hazardous Waste Permit	State of Hawai'i	Dept. of Health	Treatment, disposal and storage of hazardous waste
Asbestos Regulations	State of Hawai'i	Dept. of Health	Removing or managing asbestos
Flood Hazard Controls	County of Kaua'i	Dept. of Public Works	Any development in a flood zone area

Permit or Approval	Government Level	Granting Agency		gency	Why Required
Grading, Grubbing,	County of Kaua'i	Dept.	of	Public	Any excavation or fill, the
Excavating, and		Works			removal of vegetation from
Stockpiling Permits					the surface of the ground,
					or purposeful
					accumulation and set-aside
					of loose soil
Building Permit	County of Kaua'i	Dept.	of	Public	Erecting, constructing,
		Works			enlarging, demolishing, or
					altering any building or
					structure

<u>Source:</u> Guide to State Permits and Approvals for Land and Water Use and Development, State of Hawai'i, Office of Environmental Quality Control, 1996.

SECTION 6

AGENCIES, ORGANIZATIONS AND INDIVIDUALS TO BE CONSULTED IN THE PREPARATION OF THE ENVIRONMENTAL IMPACT STATEMENT

6.1 KŌKE'E TASK FORCE

The Kōke'e Task Force (KTF) was organized to identify issues, opportunities and constraints, and to provide guidance and review during the development of the master plan and environmental impact statement for Kōke'e and Waimea Canyon State Parks. The KTF includes representatives from the following agencies:

State of Hawai'i, Department of Land and Natural Resources:

Board of Land and Natural Resources

Division of Aquatic Resources

Division of Boating and Ocean Recreation

Division of Conservation and Resource

Enforcement

Division of Forestry and Wildlife

Division of State Parks

Land Division

State Historic Preservation Division

County of Kaua'I, Planning Department

Board of Land and Natural Resources

Commission on Water Resources

Management

Division of Aquatic Resources

Division of Boating and Ocean Recreation

Division of Conservation and Resource

Enforcement

Division of Forestry and Wildlife

Division of State Parks

Land Division

State Historic Preservation Division

Na Ala Hele Advisory Group

Department of Civil Defense

Department of Education

Department of Hawai'i an Homelands

Department of Health

Clean Water Branch

Hawai'i Air National Guard

University of Hawai'i,

Environmental Center

Hawai'i Natural Heritage Program

6.2 FEDERAL AGENCIES

Army Corps of Engineers (ACOE)

National Aeronautics and Space Administration (NASA)

U. S. Air Force (USAF)

U. S. Fish and Wildlife Service (USFWS)

U.S. Navy (USN)

6.4 COUNTY AGENCIES

County Council

Department of Public Works

Division of Parks and Recreation

Department of Water

Fire Department

Office of Economic Development

Office of the Mayor

Planning Department

Police Department

6.3 STATE AGENCIES

State of Hawai'i, Department of Land and Natural Resources:

6.5 PRIVATE ORGANIZATIONS

Boy Scouts of America

CEATECH HHGI Breeding Corp.

Friends of the Forest

Hawai'i Eco-Tourism Association

Hui o Laka

Kaua'i Invasive Species Committee

Kaua'i Visitors' Bureau

Kōke'e Museum

Kōke'e Lodge

Kōke'e Leaseholder's Association

Kōke'e Resource Conservation Program

The Nature Conservancy of Hawai'i (TNCH)

Sierra Club

Verizon Hawai'i

YWCA